Utah Division of Air Quality
New Source Review Section

Date_____
Company_____
Site /Source_____

Form 23
Rotary Kiln Incinerator

There are federal standards and guidelines that govern incineration of:
Hospital/medical/infectious waste; municipal waste; commercial/industrial waste, cement kilns. Consult 40CFR60, Subparts AAAA, DDDD, E_C, and F, as appropriate

General Information

1. Flow diagram designations of rotary kiln Incinerator described on this form:

2. Manufacturer of Incinerator:

3. Model name and number:

4. Description of material burned:

5. Maximum amount of waste to be incinerated: lb/hr

6. Estimated daily amount of waste to be incinerated: lb

7. Height of stack above grade: ft

8. Height of tallest structures within 150 feet: ft

9. Primary burner used: ? Yes ? No
Maximum rating _____ BTU/hr

10. Secondary Burner used: ? Yes ? No Maximum rating _____BTU/hr

11. Description of Typical Waste to Be Incinerated:
- ? Medical/hospital/infectious
- ? Municipal
- ? Industrial
- ? Commercial

Operational Information

12. Average operation time of incinerator: _____ hrs/day _____ days/week _____weeks/year

13. Maximum operation time of incinerator: _____ hrs/day _____ days/week _____weeks/year

14. Residence time: Primary _____ sec, Secondary _____ sec

15. Proposed BACT (Best Available Control Technology):
- ? Quench Tower
- ? Heat Exchanger
- ? Dry Scrubber DAQ Form 9
- ? Wet Scrubber DAQ Form 9
- ? Baghouse DAQ Form 10
- ? Carbon Adsorption Unit

Emission Information

16. Average Operation

Contaminant t	**Concentration or Emission Rate per Identical Source**		**Method Used to Determine Concentration or Emission Rate**
Particulate matter	gr/dscf	? lb/10^6 BTU ? lb/hr	
Carbon Monoxide	ppm (vol)	? lb/10^6 BTU ? lb/hr	
Nitrogen Oxides	ppm (vol)	? lb/10^6 BTU ? lb/hr	
Organic material	ppm (vol)	? lb/10^6 BTU ? lb/hr	
Sulfur Dioxide	ppm (vol)	? lb/10^6 BTU ? lb/hr	

16. (cont.) Maximum Operation

Contaminant	**Concentration or Emission Rate per Identical Source**		**Method Used to Determine Concentration or Emission Rate**
Particulate matter	gr/dscf	? lb/10^6 BTU ? lb/hr	
Carbon Monoxide	ppm (vol)	? lb/10^6 BTU ? lb/hr	
Nitrogen oxides	ppm (vol)	? lb/10^6 BTU ? lb/hr	
Organic material	ppm (vol)	? lb/10^6 BTU ? lb/hr	
Sulfur Dioxide Hydrogen Chloride	ppm (vol)	? lb/10^6 BTU ? lb/hr	

16. (cont.) Metals (Max. Operation)(Lbs/hr)

Cadmium – milligram/dscf	Mercury
Lead	Dioxins/furins

17. Exhaust Point Information

Flow diagram designation(s) of exhaust point:	
Description of exhaust point (location in relation to buildings, direction, hooding, etc.):	
Exhaust height above grade:	Exhaust diameter:
Greatest height of nearby buildings: ft	Exhaust distance from nearest plant boundary: ft

Average Operation	**Maximum Operation**
Exhaust gas temperature:	Exhaust gas temperature:
Gas flow rate through each exhaust point:	Gas flow rate through each exhaust point:

Emissions Calculations (PTE)
18. Calculated emissions for this device PM_{10} _____Lbs/hr_____ Tons/yr NO_x _____Lbs/hr_____ Tons/yr SO_x _____Lbs/hr_____ Tons/yr VOC _____Lbs/hr_____ Tons/yr HAPs_____Lbs/hr (speciate)_____Tons/yr (speciate) Submit calculations as an appendix.

NOTE: 1. **Submit this form in conjunction with Form 1 and Form 2.**

2. Call the Division of Air Quality (DAQ) at **(801) 536-4000** if you have problems or questions in filling out this form. Ask to speak with a New Source Review engineer. We will be glad to help!

3. Attach spec. sheets for all burners, pollution control equipment, etc.

Instructions

1. Attach flow diagram of the described incinerator.
2. Supply the manufacturer of the incinerator.
3. Supply the model and number of the incinerator.
4. Please describe the source of waste to be incinerated.
5. Supply the maximum amount of waste to be incinerated.
6. Specify the daily amount of waste to be incinerated.
7. Indicate the height of the stack above ground level.
8. Indicate the height of tallest structure within 150 feet.
9. Supply the specifications for primary burner used.
10. Supply the specifications for secondary burner used.
11. Indicate the type of typical waste to be incinerated.
12. Supply the average operation time of the incinerator.
13. Supply the maximum operation time of the incinerator.
14. Supply the residence time in the primary and secondary chambers.
15. Indicate the control technology to be use. Submit the corresponding form, if available, for the control technology. Submit specifications for control technology which a form is not available for. Forms available upon request are the following:

___	Form 3	Afterburners
___	Form 4	Flares
___	Form 5	Adsorption Unit
___	Form 6	Cyclone
___	Form 7	Condenser
___	Form 8	Electrical Precipitators
___	Form 9	Scrubber
___	Form 10	Fabric Filter

16. During average and maximum operation, specify the concentration or emission rate of the listed contaminants.
17. Supply the exhaust specifications listed.
18. Supply calculations for all criteria pollutants and HAPs. Use AP42 or Manufacturers data to complete your calculations.

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